

MSCI ESG Ratings Methodology: Board Key Issue

MSCI ESG Research LLC

December 2024



Contents

Introduction	5
Board Key Issue Score	6
Key Metrics	6
Category: Board Leadership	6
Independent Chair Key Metric	6
Combined CEO/Chair Key Metric	6
Leadership Concerns Key Metric	7
Chair Not Independent & No Independent Lead Director Key Metric	7
Category: Board Independence	8
Board Majority Independent of Management Key Metric	8
Board Majority Independent of Other Interest Key Metric	8
Executives on Board Key Metric	9
No Independent Directors Key Metric	9
Related-Party Transactions Key Metric	9
Flagged Directors on Board Key Metric	10
Overboarded Non-Exec Directors Key Metric	10
Overboarded Exec Directors Key Metric	10
Significant Votes Against Directors Key Metric	11
Oversized Board Key Metric	11
Undersized Board Key Metric	12
Board Attendance Failures Key Metric	12
Category: Board Skills & Diversity	12
Entrenched Board Key Metric	12
CEOs on Board Key Metric	13
No Female Directors Key Metric	13
Not 30% Female Directors Key Metric	13
Risk Management Expertise Key Metric	14
Category: Audit Oversight	14



	Audit Board/Committee Independence Key Metric	. 14
	Executives on Audit Board/Committee Key Metric	.14
	Audit Committee Financial Expert Key Metric	. 15
	Audit Committee Industry Expert Key Metric	.15
	Overboarded Audit Committee Members Key Metric	.15
	Category: Pay Oversight	.16
	Pay Committee Independence Key Metric	.16
	Executives on Pay Committee Key Metric	.16
	No Pay Committee & Execs on Board Key Metric	.16
	Pay Committee Concerns Key Metric	.17
	Category: Nomination Process Oversight	. 17
	No Nomination Committee Key Metric	.17
	Nomination Committee Chair Independence Key Metric	.17
	Nomination Committee Independence Key Metric	.18
	Category: Strategic Oversight	.18
	Bankruptcy or Liquidation Key Metric	.18
	Debt Covenant Concerns Key Metric	.19
	Financing Difficulties Key Metric	.19
	Capital Management Concerns Key Metric	.19
	Securities Violations Key Metric	. 20
	Threat of Delisting Key Metric	. 20
	Executive Misconduct Key Metric	. 20
	Other High-Impact Governance Events Key Metric	. 21
Εν	valuating Directors	21
	Independence	. 21
	Independent of Management	. 21
	Independent of Other Interests	. 24
	Board Positions	. 25
	Flagged Directors	. 25
	Expertise	. 26

METHODOLOGY DOCUMENT MSCI ESG RESEARCH LLC



Related-Party Transactions	27
Model Update History	29



Introduction

This document provides essential information on the components of the Board Key Issue to enable users of ESG Ratings to understand how our outputs are determined. Board is a Key Issue in the Governance Pillar of the MSCI ESG Ratings model. Companies are evaluated on the board's independence from management and/or other interests, and on various measures of board experience and effectiveness such as director attendance and director overboarding, where individual board members may compromise their effectiveness by serving on too many boards.

Negative governance-related events such as bankruptcies; securities violations or regulatory investigations; and delisting threats are included in this section. These event metrics, when flagged, may have a significant impact on a company's overall governance score.

For additional details on the MSCI ESG Ratings Model, refer to Section 2, Data, ratings and scores, of "ESG Ratings Methodology."

Exhibit 1: MSCI ESG Key Issue hierarchy

3 Pillars	10 Themes	33 ESG Key Issues
		Carbon Emissions Climate Change Vulnerability
	Climate Change	Financing Environmental Impact
		Product Carbon Footprint
		Biodiversity & Land Use
	Natural Capital	Raw Material Sourcing
Environmental		Water Stress
		Electronic Waste
	Pollution & Waste	Packaging Material & Waste
		Toxic Emissions & Waste
		Opportunities in Clean Tech
	Environmental Opportunities	Opportunities in Green Building
		Opportunities in Renewable Energy
		Health & Safety
	Human Capital	Human Capital Development
	Labor Man	Labor Management
		Supply Chain Labor Standards
		Chemical Safety
		Consumer Financial Protection
Social	Product Liability	Privacy & Data Security
oooidi		Product Safety & Quality
		Responsible Investment
	Stakeholder Opposition	Community Relations
	Stakenorder opposition	Controversial Sourcing
		Access to Finance
	Social Opportunities	Access to Health Care
		Opportunities in Nutrition & Health



3 Pillars	10 Themes	33 ESG Key Issues
		Board
	Corporate Governance	Pay
Governance	Corporate Governance	Ownership & Control
Governance		Accounting
	Corporate Behavior	Business Ethics
	Corporate Berlavior	Tax Transparency

Board Key Issue Score

The Key Issue Score is based on the aggregation of the following Key Metrics using the methodology described in Section 3.5.4, Calculating Governance Scores, of "ESG Ratings Methodology."

Each Key Metric evaluates a specific aspect of a company's governance risk profile.

Some Key Metrics are relevant only to companies with specific governance characteristics stemming from ownership type, management structure or other factors. Companies are distinguished by the type of issuer, indicated by the scope of each Key Metric below.

Key Metrics

Category: Board Leadership

Independent Chair Key Metric

Definition

Is the chair classified as not independent of management or not independent of other interests (links to employees, government or major owners), based on MSCI ESG Research criteria?

Flagged if yes.

This metric refers to the board of directors or (in a two-tier board structure) to the supervisory board. See the section Evaluating Directors, below, for details of the independence evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.1

Combined CEO/Chair Key Metric

Definition

Does the company have a combined CEO/chair?

Flagged if yes.



While the practice of combining the CEO and chairman positions on the board of directors is common enough to minimize its significance as a standalone metric, when combined with other key indicators this practice may be an indicator of potential governance weakness.

Scope: All issuers

Typical Scoring Contribution: 0.2

Leadership Concerns Key Metric

Definition

Are there concerns that there is a leader with excessive influence, including, but not limited to, instances such as:

- An executive chair is serving alongside a CEO.
- A former CEO remaining on the board as a non-executive director.
- The non-executive chair is a former CFO.
- An executive chair at one group company serves as a non-executive director at another group company.
- A founder or cofounder remains on the board but not as chair or CEO.
- Unregistered directors providing leadership direction.

Flagged if yes.

Scope: All issuers

Typical Scoring Contribution: 0.3

Chair Not Independent & No Independent Lead Director Key Metric

Definition

For companies with a non-independent chair, has the company failed to designate an individually named non-executive lead director or independent deputy chairman who is classified as both independent of management and independent of other interests (links to employees, government or major owners), based on MSCI ESG Research criteria?

Flagged if yes.

This metric refers to the board of directors or (in a two-tier board structure) to the supervisory board. See the section Evaluating Directors, below, for details of the independence evaluation criteria.

For purposes of evaluating this metric, MSCI ESG Research excludes any lead directors who have not been individually designated as such by the company. This standard explicitly excludes lead director assignments based on rotating committee chair assignments or similar practices that may weaken the role and effectively counter its intended purpose.

Scope: All issuers



Typical Scoring Contribution: 0.1

Category: Board Independence

Board Majority Independent of Management Key Metric

Definition

Are less than a majority of directors independent of management, as defined by MSCI ESG Research? Flagged if yes.

This metric flags issuers when less than 51% of the board is independent of management. See the section Evaluating Directors, below, for our definition of independence from management.

For issuers with a two-tier board structure, this Key Metric assesses the supervisory board.

Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of independent (of management) directors and whether company is controlled:

Range: 0.2 to 1.0 Average: 0.442

Board Majority Independent of Other Interest Key Metric

Definition

Are less than a majority of directors independent of other interests, as defined by MSCI ESG Research?

Flagged if yes.

This metric assesses what percentage of directors are affiliated with interests (other than those of management) that may diverge from the interests of minority investors. Issuers are flagged when less than 51% of the board is independent of other interests. See the section Evaluating Directors, below, for our definition of independence from other interests.

For issuers with a two-tier board structure, this Key Metric assesses the supervisory board.

Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of independent (of other interests) directors:

Range: 0.3 to 1.0.

Average: 0.366



Executives on Board Key Metric

Definition

Does 30% or more of the board of directors comprise executive directors or does the management board include eight or more executive directors?

Flagged if yes.

All board member bios are reviewed to determine current titles and positions.

Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of executive directors (or number of executives on a management board):

Range: 0.2 to 0.5. Average: 0.241

No Independent Directors Key Metric

Definition

Is the board composed entirely of directors who do not meet the MSCI ESG Research criteria for independence from management?

Flagged if yes.

This metric tests for those extreme cases where there is not a single member of the board of directors or supervisory board who can be considered independent of management. See the section Evaluating Directors, below, for details of the independence evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.5

Related-Party Transactions Key Metric

Definition

Have there been any disclosed related-party transactions (RPTs) in either of the two most recently reported financial years?

Flagged if yes.

See the section Related-Party Transactions, below.

Scope: All issuers

Typical Scoring Contribution: Variable, based on transaction size, type of related-party and (for higher-risk cases) qualitative criteria.

Partial disclosure: 0.5 or (if controlled) 1.0

If non-disclosure market & no company disclosure: 1.0 (scored but not flagged)



Range: 0.05 to 3.4

Average: 0.753

Flagged Directors on Board Key Metric

Definition

Are any of the board members Flagged Directors, as defined by MSCI ESG Research?

Flagged if yes.

See the section Evaluating Directors, below, for details of the evaluation criteria.

For issuers with two-tier board structures, members of either the supervisory board or the management board may be flagged.

Scope: All issuers

Typical Scoring Contribution: Variable, based on number of flagged directors on the board and number of flagged-director instances for each director.

Range: 0.2 to 1.0 Average: 0.288

Overboarded Non-Exec Directors Key Metric

Definition

Do any of the company's non-executive board members serve on the boards of three or more additional issuers (i.e., four total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)?

Flagged if yes.

Board membership counts reference the board of directors or (in a two-tier board structure) the supervisory board and the management board.

See the section Evaluating Directors, below, for details of the evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.5

Overboarded Exec Directors Key Metric

Definition

Do any of the company's executive board members serve on the boards of two or more additional issuers (i.e., three total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)?

Flagged if yes.



This is of particular significance in the case of the company's CEO. Board membership counts reference the board of directors or (in a two-tier board structure) the supervisory board and the management board. See the section Evaluating Directors, below, for details of the evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.5

Significant Votes Against Directors Key Metric

Definition

Are there one or more directors on the board who received a negative or withheld shareholder vote in excess of 10% in the most recently reported election?

Flagged if yes.

This metric refers to the board of directors or (in a two-tier board structure) to the supervisory board and the management board.

Even a negative vote of 5% indicates an unusually high vote against a particular individual director at most companies. This metric is triggered by a negative vote of over 10% against any directors in the most recently reported election (or in certain markets on the discharge of the directors). A "negative vote" includes any against, withhold or abstain votes.

Scope: All issuers

Typical Scoring Contribution: Variable, based on number of directors, the size of against/abstain/withhold votes and whether there is a controlling shareholder.

Range: 0.25 to 2.0

Average: 0.436

Oversized Board Key Metric

Definition

Does the board of directors or the supervisory board include a high number of directors that suggests obstacles to effective oversight and decision-making?

Flagged if yes.

This is currently set at 20 directors and refers to either the board of directors or supervisory board. Boards comprising so many individuals may find it harder to discuss issues in the necessary detail or take decisions in a timely manner.

Scope: All issuers

Typical Scoring Contribution: 0.5



Undersized Board Key Metric

Definition

Are there four or fewer directors on the board of directors or supervisory board?

Flagged if yes.

Boards comprising so few individuals may lack the diversity of view and experience needed to provide effective oversight over most public companies, particularly when it comes to assigning resources to the board's standing committees.

This metric refers to either the board of directors or supervisory board.

Scope: All issuers

Typical Scoring Contribution: 1.0

Board Attendance Failures Key Metric

Definition

Did any members of the board fail to attend at least 75% of all board and committee meetings held during the last reported period?

Flagged if yes.

This metric refers to the board of directors or (in a two-tier board structure) to the supervisory board and the management board.

Excessive board attendance failures have been linked to other, less visible board problems or weaknesses.

Scope: All issuers

Typical Scoring Contribution: 0.1

Category: Board Skills & Diversity

Entrenched Board Key Metric

Definition

Does the percentage of long-tenured, aging directors suggest a problem with board entrenchment? Flagged if yes.

This metric is based on an assessment of multiple factors, including director age and tenure in the following combinations:

- More than 35% of the board has a tenure of 15 years or greater;
- More than 22% of the board has a tenure of 15 years or greater and more than 15% of the directors are aged 70 or over;



- There are more than four directors who have a tenure of 15 years or greater; or
- There are more than four directors who are aged 70 or over.

This metric extends to the board of directors and supervisory board.

The strength of this metric as an indicator of potential governance problems is greatly increased at companies whose recent performance has consistently lagged their peers.

Scope: All issuers

Typical Scoring Contribution: Variable, based on CEO tenure & board refreshment rate.

Range: 0.6 to 1.5

Average: 0.884

CEOs on Board Key Metric

Definition

Is more than 30% of the board composed of currently active corporate CEOs from other companies? Flagged if yes.

This metric extends to the board of directors and supervisory board.

To be included in this category, the individual must be a currently active CEO at another publicly traded corporation; the CEO of the company being rated is excluded. Based on information contained in each individual's bio or on his or her designation as a current company CEO in the MSCI ESG Governance Metrics director database.

Scope: All issuers

Typical Scoring Contribution: 0.5

No Female Directors Key Metric

Definition

Does the composition of the board fail to include any female directors?

Flagged if yes.

This metric extends to the board of directors and supervisory board.

Scope: All issuers

Typical Scoring Contribution: 0.2

Not 30% Female Directors Key Metric

Definition

Does the composition of the board fail to include at least 30% female directors?



Flagged if yes.

This metric extends to the board of directors and supervisory board.

Scope: All issuers

Typical Scoring Contribution: 0.1

Risk Management Expertise Key Metric

Definition

Does the board lack at least one non-executive member of the board who has general expertise in risk management, based on MSCI ESG Research standards?

Flagged if yes.

This metric extends to the board of directors and supervisory board. See the section Evaluating Directors, below, for details of the evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.2

Category: Audit Oversight

Audit Board/Committee Independence Key Metric

Definition

Has the company failed to establish an audit committee or audit board comprising only directors who are independent of management based on MSCI ESG Research's criteria?

Flagged if yes.

See the section Evaluating Directors, below, for details of the independence evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: Variable, based on whether committee exists & percentage of

independent members.

Range: 0.1 to 0.8

Average: 0.145

Executives on Audit Board/Committee Key Metric

Definition

Are there company executives serving on the audit committee or audit board?

Flagged if yes.



Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of executive members.

Range: 0.2 to 0.5 Average: 0.208

Audit Committee Financial Expert Key Metric

Definition

Does the audit committee or audit board lack at least one non-executive member with general expertise in accounting or financial management, based on the MSCI ESG Research criteria?

Flagged if yes.

See the section Evaluating Directors, below, for details of the evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.1

Audit Committee Industry Expert Key Metric

Definition

Does the audit committee or audit board lack at least one non-executive member who has substantial industry knowledge, based on the MSCI ESG Research criteria?

Flagged if yes.

See the section Evaluating Directors, below, for details of the evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: 0.1

Overboarded Audit Committee Members Key Metric

Definition

Do any of the independent members of the audit committee serve on the boards of three or more additional companies (i.e., four total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)? Or do any of the non-independent members of the audit committee serve on the boards of two or more additional companies?

Flagged if yes.

This metric further emphasizes the link between overboarding and board effectiveness by testing for its presence on this committee.

Scope: All issuers



Typical Scoring Contribution: 0.1

Category: Pay Oversight

Pay Committee Independence Key Metric

Definition

Where the company has established a pay committee, are there directors serving on the committee who are not independent of management based on MSCI ESG Research's criteria?

Flagged if yes.

See the section Evaluating Directors, below, for details of the independence evaluation criteria.

Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of independent members.

Range: 0.1 to 0.3 Average: 0.126

Executives on Pay Committee Key Metric

Definition

Are there company executives serving on the pay committee?

Flagged if yes.

In addition to evaluating the independence of its non-executive members, MSCI ESG Research also takes into consideration the presence of current company executives on this standing committee.

Scope: All issuers

Typical Scoring Contribution: Variable, based on percentage of executive members.

Range: 0.1 to 0.2 Average: 0.103

No Pay Committee & Execs on Board Key Metric

Definition

Does the company lack a standing pay committee, and are current company executives serving on its board?

Flagged if yes.

This metric is flagged for boards that lack a formally named pay committee yet include among its members one or more current company executives, including the CEO.



Scope: All issuers

Typical Scoring Contribution: 0.6

Pay Committee Concerns Key Metric

Definition

Does the composition of the pay committee raise concerns about the presence of active CEOs on the committee or in relation to the past record of the pay committee chair?

Flagged if yes.

This metric is triggered by the majority of pay committee or the committee chair being active CEOs, where the pay committee chair also chairs other pay committees and the latest annual say-on-pay vote was defeated, or where the pay committee chair is a former listed-company CEO and during his CEO tenure the say-on-pay vote was defeated.

Scope: All issuers

Typical Scoring Contribution: 0.3 (if one test is met)

0.5 (if Pay Committee is 100% active CEOs)

0.6 (if two or more tests are met)

Category: Nomination Process Oversight

No Nomination Committee Key Metric

Definition

Does the company lack a standing nomination committee?

Flagged if yes.

This metric flags issuers that have not disclosed a formal nomination committee. A committee with the responsibility to nominate directors for election to the board will generally be considered a nomination committee, regardless of its name or other roles.

Scope: All issuers

Typical Scoring Contribution: 0.3

Nomination Committee Chair Independence Key Metric

Definition

Is the nomination committee chair not independent of management or other interests, as defined by MSCI ESG Research?

Flagged if yes.



We consider it a best practice for key committees to be led by members who are independent of management, and, in some markets, nomination committees may include a high proportion of stakeholder representatives whose interests may diverge from those of minority investors. Therefore, this metric assesses the committee chair's independence from both management and other interests. See the section Evaluating Directors, below, for our definitions of independence.

This metric is not evaluated for companies that lack a nomination committee.

Scope: All issuers

Typical Scoring Contribution: 0.1

Nomination Committee Independence Key Metric

Definition

Are less than a majority of nomination committee members independent of management and other interests, as defined by MSCI ESG Research?

Flagged if yes.

We consider it a best practice for key committees to be independent of management, and, in some markets, nomination committees may include a high proportion of stakeholder representatives whose interests may diverge from those of minority investors. Therefore, this metric assesses what percentage of the committee is independent of both management and other interests. See the section Evaluating Directors, below, for our definitions of independence.

This metric is not evaluated for companies that lack a nomination committee.

Scope: All issuers

Typical Scoring Contribution: 0.1

Category: Strategic Oversight

Bankruptcy or Liquidation Key Metric

Definition

Is the company, or a material subsidiary, currently in receivership, under bankruptcy protection, or facing liquidation?

Flagged if yes. The flag will be removed once the case is assessed as concluded.

This Key Metric focuses on negative credit events including bankruptcy protection, administration, receivership, curatorship and liquidation.

Scope: All issuers

Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.8, Severe 1.5, Very Severe 3.0



Debt Covenant Concerns Key Metric

Definition

Has the company, or a material subsidiary, recently breached the terms of its debt covenants, had a test of its debt covenant terms deferred or waived, or been reported to be in danger of breaching its debt covenants?

Flagged if yes. The flag will be removed once the case is assessed as concluded.

This Key Metric focuses on negative credit events including failure to repay (or defer paying) capital or interest on the debt, breaching terms (or waiving or deferring the testing) of the debt covenants such as exceeding borrowing limits or breaches of technical provisions.

Scope: All issuers

Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Financing Difficulties Key Metric

Definition

Have concerns been identified by the board or been reported in the press in relation to the going-concern assumption, or is there other evidence that the company, or a material subsidiary, may be facing financing difficulties?

Flagged if yes. The flag will be removed once the case is assessed as concluded.

This Key Metric seeks to identify where there is a risk of a negative credit event. A successful outcome, such as an equity-raising or renegotiated credit terms, may resolve this concern, and forms part of the severity assessment criteria.

Scope: All issuers

Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Capital Management Concerns Key Metric

Definition

Have concerns been raised as to the treatment of security holders in relation to the raising and/or return of capital?

Flagged if yes. The duration of the flag is dependent on the severity assessment.

Circumstances that may be flagged include where investors face high potential equity dilution through the new issue of shares, where there has been unfair treatment of existing investors in capital-raisings, or where there are concerns about share buyback activity.

Scope: All issuers



Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Securities Violations Key Metric

Definition

Has the company faced allegations that investors have not been given access to certain basic facts about the company, whether in the process of issuing new securities or following issuance? Or has the company faced substantive allegations of breaches of investor protection requirements (including in relation to offers it makes for third parties)?

Flagged if yes. The duration of the flag is dependent on the severity assessment.

Note: Items that relate specifically to Accounting and Audit issues are covered in the Accounting Key Metrics.

Scope: All issuers

Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Threat of Delisting Key Metric

Definition

Is the issuer currently in breach of its continuing obligations that apply to the listing of its securities, which may threaten the continued listing or trading of those securities?

Flagged if yes. The flag will be removed once the case is assessed as concluded.

Scope: All issuers

Typical Scoring Contribution: 0.5

Executive Misconduct Key Metric

Definition

Has a current or recent member of the board or a senior executive of the company (and while serving at this company) allegedly failed to act with honesty and integrity, engaged in actions contrary to the interests of the company and its shareholders, breached trust or confidence, engaged in criminal actions or engaged in actions that caused damage to the company's reputation?

Flagged if yes. The duration of the flag is dependent on the severity assessment.

This metric refers to current or former members of the board of directors, management board (in a two-tier structure) and executive committee.

¹ The Securities Violations Key Metric contributes to the Board Key Issue Score, but does not contribute to the Corporate Governance Theme Score, the Governance Pillar Score or the ESG Rating.



Scope: All issuers

Typical Scoring Contribution: ² Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Other High-Impact Governance Events Key Metric

Definition

Has the company faced situations that may distract the board from focusing on business operations and strategic matters; have major questions been raised as to the quality of past board decisions; or is there evidence of governance failures at the company?

Flagged if yes. The duration of the flag is dependent on the severity assessment.

Scope: All issuers

Typical Scoring Contribution: Variable, based on event severity: Minor 0.0, Moderate 0.5, Severe 1.0, Very Severe 2.0

Evaluating Directors

Independence

Director independence is assessed along two dimensions — independence from management and independence from other interests (employees, major owners, government).

The Board Leadership Key Metrics require independence from both management and other interests, however, assessments of the board as a whole and of the various board committees are based on the independent of management criteria only.

Lengthy tenure is not evaluated as part of the independence assessments but forms part of the Entrenched Board Key Metric evaluation criteria.

Independent of Management

Per MSCI ESG Research's definition of independence from management, a director will be considered not independent of management if they meet one or more of the following criteria in Exhibit 2.

² The Executive Misconduct Key Metric contributes to the Board Key Issue Score, but does not contribute to the Corporate Governance Theme Score, the Governance Pillar Score or the ESG Rating.



Exhibit 2: Not Independent of Management³

Reason	Definition
Current	A current paid executive or employee of the company or group.
Executive or Employee	Current non-executive employee, or lower-level executive who is not a member of the executive board, management board or other top-level executive body.
	Exception: Is holding the board position due to being an employee or union representative.
Past Executive or Employee	A past executive or employee of the company or group; no matter how long ago the employment was terminated.
	Exception: Interim CEOs who were independent prior to becoming CEO (provided the interim service period is six months or fewer).
	Within the last five years, has been an employee of a predecessor company that represented more than 50% of the company's sales or assets when it became part of the company, or an employee of a business acquired by the company.
	Within the last five years, has been an employee or other representative of a former parent company following a spin-off or divestment, regardless of the parent's current interest.
Links to Controlling Owner	A director who is a controlling owner or executive of an entity that has effective majority control (30% or more of the total voting rights) of the company in question.
Company Founder	Company founder(s), regardless of their current employment status with the company, current share ownership, and/or current economic interest in the company.
Links to Executives	A director with a family or close personal relationship with an executive of the company.
	A director who is an employee of a company owned or run by a member of management or by a non-independent director.
Professional or personal services	Anyone providing personal/professional services to the company or to a member of the company's senior management for a fee of at least USD 120,000 per year or for an amount more than 50% of their annual director fee;*
	Within the last three years has been an owner, partner, employee or paid adviser to a professional services firm (e.g., law firm, accounting firm, insurer, underwriting firm, commercial bank, information technology

³ Previously, directors considered independent of management were labeled as "Outside," directors considered not independent of management were labeled as "Outside Related" or, if executive, as "Inside."



Reason	Definition
	consultant, management consultant) that has provided services of at least USD 120,000 (or for an amount more than 50% of their annual director fee)* per year to the company or to a member of the company's senior management;
Sale of goods or services	Owner, partner, employee, paid adviser or director of a publicly traded firm that within the preceding or current fiscal year has sold goods or services to the corporation for a fee representing more than 1% of the sales of the supplier or the corporation.*
	Owner, partner, employee, paid adviser or director of a private firm that has sold goods or services to the corporation for a fee of more than USD 250,000 (or for an amount more than 100% of their annual director fee)* to the corporation.
Charitable contributions	Employees, directors or trustees (as opposed to general members) of a non-profit organization to which the company made charitable contributions of USD 100,000 or more (or for an amount more than 50% of their annual director fee)* in the last fiscal or calendar year.
Fees received	A non-executive chair whose annual cash compensation is equal to or greater than 50% of the total cash compensation (salary plus bonus) of any of the named executive officers or is more than five times that of other non-executive directors (whichever is greater).
Interlocked directors	A non-executive of the evaluated company serves as an executive at a second company and an executive of the evaluated company serves as the non-executive of the second company ("interlocked directors"). Once the interlock ends, if the non-executive remains on the board, the non-executive continues to be assessed as not independent of management for a three-year period.
Company	Any individual classified as not independent by the company itself.
assessment	Exceptions: If the reason(s) identified following a review of biographical and other information are limited to the following:
	Tenure;** and/or
	 One or more of the criteria in Designated Director/ Independence of Other Interests; and/or
	 Due to holding the role of non-executive chair (in the U.K.).
Insufficient biographical information	If a company does not disclose enough information regarding its directors to properly judge independence (e.g., by not disclosing director biographies).
Other scenarios	We may also review other situations not explicitly covered above and will use our best judgment to determine if a director's relationship with the company warrants classification as non-independent.



*If the monetary value of goods or services sold to the corporation is not disclosed, the director will be classified as non-independent. Exception: If the company confirms that the relevant amount falls below a regulatory threshold that is itself at or below the threshold applied by MSCI ESG Research.

**See above for the definition of the Entrenched Board Key Metric, which incorporates director tenure into the assessment.

Independent of Other Interests

Per MSCI ESG Research's definition of "independent of other interests" a director will be considered not independent of other (non-management) interests if they meet one or more of the following criteria: in Exhibit 3.

Exhibit 3: Not Independent of Other Interests⁴

·		
Reason	Definition	
Employee Representative	The director's role on the board is formally recognized as representing employees or is elected by employees or is nominated by employees for election by shareholders.	
Employee Shareholder Representative	The director's role on the board is formally recognized as representing employee shareholders or is elected by employee shareholders or is nominated by employee shareholders for election by shareholders (most instances are in France).	
Union Representative	The director's role on the board is formally recognized as representing employee unions or is a full-time union official (e.g., "full-time shop steward" or similar).	
Links to Major Owner	A director who is an owner or executive of an entity that has at least 10% of the voting rights of the company in question (note that if the percentage of voting rights exceeds 30%, the director is also considered not independent of management, per above).	
Links to Family	The director is either:	
	 specifically designated as representing a family owner or owner group under a formal agreement or governing document provision; or 	
	 is a member of the family that historically has been involved at the firm, even where the family no longer holds more than 10% of the total voting power. 	

⁴ Previously, directors considered not independent of other interests were labeled as "Designated."



Reason	Definition
Links to	The director is either:
Founder	 specifically designated as representing the founder under a formal agreement or governing document provision; or
	 is closely associated with the founder, even where the founder no longer holds more than 10% of the voting power.
Special	The director has either:
Shareholder Representative	 been specifically designated under a formal Shareholders' Agreement signed by the issuer and a shareholder (regardless of the size of the shareholding); or
	 the director's biographical information or other relevant disclosure provides clear evidence of the designation, and the shareholder holds less than 10% of the voting power.
Share-Class Designated	The director has been specifically designated as representing the interests of shareholders of a specific class or where the director's biographical information or other relevant disclosure provides clear evidence of the designation.
	Note: Merely being elected by a specific share class is insufficient to meet this standard.
Government Representative	The director's role on the board is to represent the government, including where the government is a shareholder or the holder of a golden share. This representation may be:
	 formally recognized or designated; or
	 the director is a currently serving government minister or a senior government official.
Other	We may also review other situations not explicitly covered above and will use our best judgment to determine if a director's relationship with the company warrants classification as designated.

Board Positions

Board counts reference companies included in the MSCI ESG Research's corporate governance coverage universe, including both equity and debt issuers. When counting membership of boards at dual-listed companies, this is counted as one role, even if technically these are two separate companies.

Flagged Directors

An individual is considered a Flagged Director if, during their tenure as a director of an issuer:



- the issuer (or a subsidiary) entered liquidation proceedings or bankruptcy protection resulting in a significant loss of investor value;
- the issuer experienced a significant loss of investor value that may be linked to a failure of board oversight; or
- the individual was subject to a legal or regulatory censure or sanction relating to their behavior as a director or executive.

In assessing Flagged Director status, we consider an individual's entire career as a corporate director, including but not limited to their tenure at the issuer under assessment. For bankruptcies, liquidations or other events resulting in significant losses of investor value, individuals are flagged only if their tenure on the relevant board began at least one year prior to the event.

Flagged Director status does not expire, and multiple flagged instances may be identified for a particular director.

Expertise

Biographies are reviewed on an individual basis to determine whether the evaluation criteria for the expertise designations set out in Exhibit 4 are met.

Exhibit 4: Director Expertise Evaluation Criteria

Emphise Trees	Fundamentaria
Expertise Type	Evaluation Criteria
Financial	Evidence of financial or accounting expertise, including a close review of previous or current titles or positions. Includes:
	 Professional experience such as audit firm partner/executive, CFO/Finance Director of a public firm or subsidiary/division of such firm, etc.
	 Professional designations such as FCA, CPA, etc.
	 For markets with strict financial expertise rules, the company's own designations regarding financial expertise are generally accepted as such.
	General statements such as "financial literacy" are not accepted as evidence of financial expertise.
Industry	Evidence that a director has served as an executive at a company in the same industry as the board on which they serve.
	Directors are tagged with up to two Global Industry Classification Standard (GICS®) ⁵ industries, these being the GICS industries of companies where they currently hold or previously held executive roles. Equivalent evaluations are undertaken where the executive post is/was with a private firm.

⁵ GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.



Expertise Type	Evaluation Criteria	
Risk Management	Evidence of previous executive-level experience at one or more companies where the biography includes a specific reference to risk management. Includes experience as:	
	 A risk officer/manager at divisional/subsidiary or group level of a public or private company. 	
	 An executive tasked with specific risk management duties. 	
	 Membership of an executive-level (not board-level) risk committee. 	
	An insurance company CEO.	
	 A risk consultant (principal, executive or partner) in a risk consulting firm or practice. 	
	 A public sector risk management executive or expert. 	
	 An academic focused on the subject of risk. 	
	General statements such as "risk management expertise" are not accepted as evidence of risk management expertise.	

Related-Party Transactions

The Related-Party Transaction (RPT) Key Metric is assessed using a common framework across the entire issuer universe. This framework was developed by MSCI ESG Research based on a review of research published by the OECD^{6,7,8} and with reference to the International Financial Reporting Standards.⁹

Related parties may include:

- · Directors and officers, and their family members;
- Any entities that control or are under common control with the company, including executives of such entities and members of their families;
- Significant shareholders (10% or more), including members of their families; and
- Management companies, managing partners and other entities to whom the management or operations of the company have been delegated.

Non-wholly owned subsidiaries may be considered related parties if another shareholder in the subsidiary is one of the parties noted in the list above.

⁶ OECD. "G20/OECD Principles of Corporate Governance." 2023.

⁷ OECD. "Related Party Transactions and Minority Shareholder rights." March 2012.

⁸ OECD. "Guide on Fighting Abusive Related Party Transactions in Asia." September 2009.

⁹ The International Financial Reporting Standards Foundation. "IAS 24 Related Party Disclosures". April 2001 (as revised).



Related-party transactions can vary widely by type, reflecting the variety of transactions generally undertaken by companies, and may be either one-off or recurring in nature.

Transaction types may include:

- Revenue;
- Expense;
- Sale or purchase of assets;
- Loan to/from company; and
- Loan guarantee.

Any loans to executive directors, other senior executives, company founders or their family members will be regarded as related-party transactions in all cases.

Loans to other non-executive directors by companies will be regarded as related-party transactions, except in cases where the company is operating in the financial sector in the normal course of business.

If a non-executive director is flagged as not independent of management due to transactions with the company that exceed the stated thresholds, these will also be regarded as related-party transactions for the company.

We generally do not consider the following to be related-party transactions, unless exceptional circumstances apply:

- Generally available government grants and subsidies;
- Investments in government bonds and other government-issued securities;
- Dividends paid to all shareholders generally;
- Directors & officers insurance and indemnification provisions provided to all directors;
- Remuneration paid to directors and executives; and
- Employment of family members, provided the family member's pay falls within an appropriate range for the seniority of the role and the experience of the individual.

The size of the related-party transactions is assessed based on the percentage of revenue or recurring revenue, expenses or recurring expenses and (for asset transfers, loans or loan guarantees) total assets.

Related-party transactions are identified as higher-risk where:

- The Controlling Shareholder Concerns Key Metric is flagged AND there are RPTs with the controlling shareholder;
- There are RPTs with the CEO and/or his family members;
- Family firm = Yes and there are RPTs with family members;
- Founder firm = Yes and there are RPTs with the founder;
- State Owned Enterprise (SOE) = Yes and there are one-off RPTs with the State; or



The No Independent Directors Key Metric is flagged.

Model Update History

In June 2022, the Board Key Issue was updated to capture additional governance risks posed by directors with other outside interests and boards that lack an independent nomination committee.

In December 2024, the Board Key Issue was updated to clarify the circumstances in which the Leadership Concerns Key Metric is flagged.



Contact us

msci.com/contact-us

AMERICAS

United States + 1 888 588 4567 *
Canada + 1 416 687 6270
Brazil + 55 11 4040 7830
Mexico + 52 81 1253 4020

EUROPE, MIDDLE EAST & AFRICA

 South Africa
 + 27 21 673 0103

 Germany
 + 49 69 133 859 00

 Switzerland
 + 41 22 817 9777

 United Kingdom
 + 44 20 7618 2222

 Italy
 + 39 02 5849 0415

 France
 + 33 17 6769 810

ASIA PACIFIC

+86 21 61326611 China Hong Kong +852 2844 9333 India + 91 22 6784 9160 1800818185 * Malaysia South Korea + 82 70 4769 4231 +6567011177 Singapore Australia +612 9033 9333 Taiwan 008 0112 7513 * Thailand 0018 0015 6207 7181 * Japan +81345790333

* toll-free

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading researchenhanced solutions that clients use to gain insight into and improve transparency across the investment process.

About MSCI ESG Research Products and Services

MSCI ESG Research products and services are provided by MSCI ESG Research LLC, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research LLC. are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

To learn more, please visit www.msci.com.



Notice and disclaimer

This document is research for informational purposes only and is intended for institutional professionals with the analytical resources and tools necessary to interpret any performance information. Nothing herein is intended to promote or recommend any product, tool or service.

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. The calculation of indexes and index returns may deviate from the stated methodology. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH.

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its



METHODOLOGY DOCUMENT MSCI ESG RESEARCH LLC

research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at https://adviserinfo.sec.gov/firm/summary/169222.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at https://www.msci.com/privacy-pleage.